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The Relationship Between Pain Acceptation and Physical Disability Rate, Quality of Life and General Health in Chronic Pain

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Abstract

The aim of the present study the relationship between pain acceptation on level of physical disability and quality of life and general health of the women and men patients with chronic pains. The main sample includes 120 chronic pain patients that suffer pain more than 3 months were participating from August to September 2011 by the quota sampling method. Patients completed pain acceptation and physical disability rate (1993) , quality of life (1985) and general health (1980) inventory. The result showed that the physical disability rate and quality of life and general health variants had a significant effect on pain acceptation. Also, length of disease and grade of education were effective, but gender variant was not effective. According to the result of research, focus on increasing of quality of life and general health could have an important effect on pain acceptation. Also, length of pain and grade of education was effective but gender and old were not effective.

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1. Introduction

Pain is the most popular pressure that we encounter and none of the other physical symptoms are pain to learn. (McCracken, 2006). Chronic pain is pain that patients over the past six months have experienced it every day for three months, despite treatment done. (Asghari et al, 2008). Results of studies in industrialized countries show that chronic pain is not only the most common problem is people who are of working age but one of the major risk factors for morbidity as well as those of the community is considered and between 33 to 50 percent of these patients to perform their usual duties and activities run low or are unable (Nicholas et al, 2009). Complete relief of pain for many patients with chronic pain is unattainable yet (Sullivan, 2008). Chronic pain continues despite treatments and it's associated with negative emotions (depression, anxiety, stress and anger), physical disability, sleep disturbance, professional and family problems, Reduction quality of life and visiting frequently to medical centers (McCracken, 2010). In bio-medical pain theory, effort of clinical psychologists had been focused on identifying the cause of pain. (Bemeny et al, 2010). This theory focuses on the belief that pain has necessarily a physical source and in this case it can be eliminated with the use of medical procedures (Bemeny et al, 2010). Today there is extensive research resources shows that although behavioral and psychological factors may have not a significant role in the onset of pain, but These factors have a crucial role in the perpetuation of pain and disability from it, that can significantly

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impact on a person's life and his mental health (Ghaffari et al, 2006). The interesting point is that the pain cannot justify intensity and extent of disability by itself. To demonstrate this many studies show a little relative between the physical findings of expressions of pain and disability in chronic pain patients. This heterogeny notes that the possibility of important factors that may be involved in the reduction or increase of disability. Today, there are a variety of psychological concepts to explain the relationship between chronic pain and disability in patients, such as acceptance of pain. (MAC longtime, 2007).

Acceptance of pain is considered in most theories of psychotherapy. In recent decades, new cognitive-behavioral approaches such as based on acceptance and commitment therapy play upon acceptance what cannot be directly changed (like thoughts, emotions, physical sensations) and acceptance is one of the key processes of this therapy. Studies show that any number of school year, increases the acceptance of pain, as well as married people accept pain more than single people (McCracken and colleagues). In many research, intensity of pain and physical damage are considered the important anticipant of inability. (Leo, 2007). Intensity of pain is the outcome that evaluated in clinical research widely and to determine the relationship between pain and other variables are useful. Intensity of pain can put the physical impact and mental impact on the patient and his life and it can change a patient's life (Nork, 2005). Also the imagination of the patient about his disease and his physical tolerance level and mental tolerance level of pain can influence on his operations and quality of life (Mousavi, 2006). Measuring quality of life in the new studies is the most popular research. Quality of life is a multidimensional concept that includes physical, social and mental related aspects of a specific disease and its treatment. Quality of life is a descriptive term that notes to health and improving emotional, physical and social life and also their ability to perform daily living tasks refers. So what was said psychological factors have a significant impact on life and can alter the quality of life (McMahon, 2006). One of the issues that are closely linked to the quality of life is person's general health. In modern industrial society, the issue of health is one of the major categories. There are different views about the definition of mental health. World Health Organization (WHO) defines health as: Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. (Mazner and Kramer, 1985). Campbell's Psychiatric Dictionary defines mental health as feeling better psychologically and socially adequate compliance with accepted community standards (Pourafkari, 1998). According to Kaplan and Sadok (1991) Mental health is the one of welfare states of emotional that persons play a role in society with it and improvements and personal characteristics will be satisfactory for them. Jones (1942 quoted Velman, 1965) describes mental health with Pleasure or happiness. Given that the most research on chronic pain searched in western countries with the different cultures from the Iranian culture. According to cultural factors can affect the acceptance of pain and response to pain, we seek to answer this question: Can the acceptance of pain influence on the degree of physical disability and quality of life for patients and their general health?

2. Methods

The study is the correlation. The study population included all patients with chronic pain that have been referred chronic pain clinics in Tehran in 2011. The sample comprised from 120 women and men referred to the Narmak Chronic Pain Clinic and Ansari Hospital, that have been selected by available method. All samples examined by a doctor and are diagnosed as chronic pain patients. After recognition persons as chronic pain patients, 4 questionnaires were given to them and the way of filling the forms has been described to patients. In addition to the questionnaires, each participant filled out a questionnaire relating to his/her public information. After coding and entering data into the computer, it was evaluated with SPSS software. In order to analyze the data, in addition to describing the statistic test, it has been used the regression and correlation.

2.1. Acceptance of chronic pain questionnaire:

This form evaluates chronic pain in two subscales: commitment to the activity (11 quotation) and satisfaction with pain (9 quotation). These phrases of the questionnaire were based on a Likert scale on 7 levels scoring from

zero to 6. The score ranges between zero to 120. Questionnaire validated 0.79 to 0.85 by McCracken applying Cronbach's alpha.

2.2. Disability from pain questionnaire:

It has been made by Roland and Morris (1983) with the purpose of measuring of disability in everyday tasks due to existance of pain and it is a self-reporting tool that has 24 questions. Psychometric properties of the questionnaire have been reported after the changes by Asghari and Nicholas (2001). Questionnaire validated 0.88 by Mousavi and colleagues (2006) applying Cronbach's alpha.

2.3. Quality of life questionnaire:

For measuring quality of life the World Health Organization Quality of Life form (1998) is used that contains 26 questions. The results reported by the World Health Organization Quality of Life scale manufacturers that have been organized in 15 international centers. Quality of life questionnaire, has been validated for the first time by Nejat (2006) and it has been reported by Cronbach's alpha 0.73 to 0.89.

2.4. General health questionnaire:

General Health Questionnaire by Goldberg, who made 28 questions and the range of scores are between zero and 84. Questionnaire validated by 0.87 Noorbala (2002) applying Cronbach's alpha.

3.Results

The following results are obtained based on the research hypotheses.

Table 1

ANOVA and linear components of the three branches of the pain

Source of Variation	Sum of squares	Degree of freedom	Mean squared	The test static	P-value
Regression	29963.867	2	9987.956	96.804	0.05
Error	11968.497	116	103.177		
Total	41932.367				

Results showed that there is a significant relationship at level 0.05 between the three-fold components (degree of physical disability, quality of life and general health).

Acceptance of pain = $105.065 - 0.247X_1 + 194X_2 - 1.871X_3$

Degree of physical disability rated at X_1, X_2 is the quality of life and X_3 is general health.

Table 2

The relationship between the physical disability rate and gender of patients

	Parameter estimation	The test statistic	P-value
Fixed regression	135.295	27.044	0.000
Degree of physical disability	-3.431	-13.207	0.000

Gender	-0.902	-0.410	0.682

Results showed that there is no significant relationship at level 0.05 between the physical disability rate and gender of patients.

Acceptance of pain = $135.295 - 3.431X_1 - 0.902X_2$

Degree of physical disability rated at X_1 and X_2 is component score of gender.

Table 3

The relationship between the physical disability rate and disease duration

	Parameter estimation	The test statistic	P-value
Fixed regression	139.945	28.906	0.000
Degree of physical disability	-3.155	-11.141	0.000
Disease duration	-4.743	-2.250	0.026

Results showed that there is a significant relationship at level 0.05 between the physical disability rate and disease duration.

Acceptance of pain = $139.945 - 3.155X_1 - 4.743X_2$

Degree of physical disability rated at X_1 and X_2 is component score of disease duration.

Table 4

The relationship between the physical disability rate and patient education

	Parameter estimation	The test statistic	P-value
Fixed regression	128.160	22.995	0.000
Degree of physical disability	-3.269	-11.795	0.000
Education	-1.574	-1.615	0.109

Results showed that there is no significant relationship at level 0.05 between the physical disability rate and patient education.

Acceptance of pain = $128.160 - 3.269X_1 - 1.574X_2$

Degree of physical disability rated at X_1 and X_2 is component score of patient education.

Table 5

The relationship between the physical disability rate and age

	Parameter estimation	The test statistic	P-value
Fixed regression	137.241	29.868	0.000
Degree of physical disability	-3.179	-10.347	0.000
Age	-2.029	-1.559	0.122

Results showed that there is a significant relationship at level 0.05 between the physical disability rate and Age.

Acceptance of pain = $137.241 - 3.179X_1 - 2.029X_2$

Degree of physical disability rated at X_1 and X_2 is component score of Age.

4. Discussion

The main hypothesis of this research based on the influence of acceptance of pain on disability rate, quality and general health were approved and acceptance of pain could forecast the physical disability rate and quality of life and general health significantly. These findings are similar and consistent to Nicholas and Asghari's report (2006) with Australian sample, also McCracken and Eccleston (2005) and McCracken and colleagues (2000) in English sample, and also Mesgarian and Asghari (2011) in Iranian sample. Based on the main hypothesis of study, the effectiveness of the quality of life is the most effective variable than the other variables, and then the physical disability rate is more effective. General health has a negative score in the formula because if the score of the patient is lower his/her general health is better. Actually how much the quality of life of the chronic pain patients is more and the explained degree of his/her disability is less, the score of acceptance of pain increases. Also related to disease duration and degree of disability is determined that there was a significant relationship between them and how much the disease duration is less acceptance of pain increases. It can be concluded that with increasing duration of disease, psychological factors and erosion disease causes reduced tolerance of patient and disabling him/her to effectively cope and manage the disease. Bemini and colleagues' studies (2010) and Whites and colleagues (2009) also have reported similar results. In relation to age and degree of disability is determined that there was a significant relationship between increasing age and disability rates that reported by a patient, this matter is similar to the results of McCracken (2000) and Nicholas (2006). In relation to gender and education, and degree of disability is determined that there is no significant relationship between increasing age and education, and with increasing age and education the degree of disability that has been reported by patients will not be more. It can be concluded that the degree of disability of the person is affected by other factors and it cannot greatly affect gender and education.

5. Conclusion

On based the findings of this study, perhaps can say the treatment interferences to improve acceptance, such as a treatment based on acceptance and commitment, can decrease disability rate and increase quality of life and general health by increasing level of acceptance of chronic pain and cause patients to operate better.

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